

PATENT

Atty. Dkt. No. WEAT/0275

**REMARKS**

This is intended as a full and complete response to the Final Office Action dated November 16, 2006, having a shortened statutory period for response set to expire on February 16, 2006. Please reconsider the claims pending in the application for reasons discussed below.

***Claim Rejections - 35 U.S.C. § 103***

Claims 1-3 and 5-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fraser* (U.S. Patent No. 3,517,546). In response, Applicants respectfully traverse the rejection.

Claim 1 recites a method in which an express act involves "generating data representative of an acoustical characteristic of the pipeline from the interaction between the pipeline pig and the inner diameter of the pipeline." *Fraser* discloses an apparatus in the form of a leak detector that is not used to perform the claimed methods. The leak detector itself cannot teach this method limitation or any other claimed action without a description of the detector's use that corresponds to the claimed actions, or at least some motivation or suggestion to use the detector taught in *Fraser* to perform the methods as claimed. However, such a teaching is missing, and the Examiner fails to establish any motivation or suggestion to use the detector in *Fraser* as recited in the claims.

First, the Examiner selectively truncates a citation from *Fraser* to impermissibly alter what is actually taught therein. Column 4, lines 2-4, in *Fraser* states that "[t]he pig, as it passes through the pipeline, will *detect all noises that occur in the pipeline above the set pass band*". In other words, the pig **does not** detect all noises that occur but rather only "frequencies above 30,000 Hz."

Secondly, whether noise occurs, is generated or even is "detected" fails to meet the claimed limitation of "generating data." Data is "a body of facts; information" as defined by *Dictionary.com Unabridged* (v 1.1). at <http://dictionary.reference.com/browse/data>. While some form of detection may be a prerequisite for generating a body of facts in some circumstances, this act of generating

Page 6

529834\_1.DOC

PATENT

Atty. Dkt. No. WEAT/0275

data is distinct from mere detection. With respect to *Fraser*, "the travel noise generated on the front of the pig is substantially equal to that generated behind the pig and thus the travel noises will be cancelled in the detecting circuit," while "the noises due to leakages will not be balanced in the detecting circuit and recordable signals will be recorded." Col. 4, lines 4-13.

Claim 1 further utilizes "the data" in an analysis action that includes "analyzing the data to determine the condition of the pipeline." The term "analyzing" means "to examine carefully and in detail so as to identify causes, key factors, possible results, etc.," as defined in *Dictionary.com Unabridged (v 1.1)* at <http://dictionary.reference.com/browse/analyzing>. Without any of the "data representative of an acoustical characteristic of the pipeline from the interaction" generated in the methods disclosed in *Fraser*, there inferentially cannot be any analysis in *Fraser* of this claimed data, as recited in claim 1. Furthermore, the Examiner states that if something "rejects frequencies below 30,000 Hz, the frequencies between 75 to 300 Hz are still analyzed." However, the Examiner misinterprets the term analyzing and hence the claimed limitation. This misinterpretation of an act that involves "analyzing the data to determine the condition of the pipeline" provides an illogical result since mere blind exclusion of 75 to 300 Hz (frequency range exemplarily used here since used by the Examiner) would fail to provide any information as to the condition of the pipe.

In contrast to the invention recited in claim 1, *Fraser* discloses the leak detector that detects *and records* only "high frequency noises that result from the leakage of fluid through a leak in the pipeline." See, Col. 4, lines 6-12. Moreover, travel noises in the method of *Fraser* are cancelled as described in column 4, lines 4-7. These travel noises are generated by the pig passing through the pipeline as it goes over welds or other obstructions. See, Col. 2, lines 14-16 and 39-42.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. Based on the foregoing, *Fraser* fails to teach, show or

PATENT

Atty. Dkt. No. WEAT/0275

suggest each and every limitation of claim 1. Therefore, Applicants submit that claim 1 and all claims dependent thereon are allowable and request allowance thereof.

***Claim Rejections - 35 U.S.C. § 102***

Claims 15, 16, 31, 33-37 and 41 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Fraser* (3,517,546). In response, Applicants respectfully traverse the rejection. Claim 15 is amended to include the limitation of its previous dependent claim 16 such that no new issue is raised. Further, claims 31 and 33-37 have been canceled without prejudice.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). With respect to claim 15, *Fraser* does not disclose "each and every element as set forth in the claim."

Specifically, *Fraser* does not disclose "generating data representative of the frequency response; and analyzing the data to give data representative of the condition of the pipeline, wherein analyzing the data comprises analyzing a frequency range between about 75 Hz and 300 Hz." As discussed in the above section with respect to the obviousness rejection of claim 1 in view of *Fraser*, the method taught in *Fraser* is missing any generation of data and analysis thereof in any frequency range below 30,000 Hz. Therefore, *Fraser* cannot anticipate claim 15 or any claim dependent thereon. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of the claims.

***Claim Rejections - 35 U.S.C. § 103***

Claims 38 and 43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fraser* (3,517,546) in view of *Marsh et al.* (4,541,278). Claims 39 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fraser* (3,517,546) in view of *Lara* (4,747,317). Claim 42 is rejected under 35 U.S.C. § 103(a) as being

Page 8

529834\_1.DOC

PATENT

Atty. Dkt. No. WEAT/0275

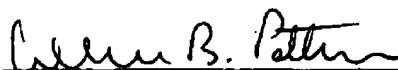
unpatentable over *Fraser* (3,517,546) in view of *Savard* (2003/0056309). In response, Applicants

Applicants submit that claims 38, 43, 39, 40 and 42 are allowable based at least on the traversal presented herein regarding the independent claims from which these claims depend. Accordingly, Applicants request withdrawal of the rejection and allowance of the claims.

### **Conclusion**

Having addressed all issues set out in the Final Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



William B. Patterson  
Registration No. 34,102  
PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicants